

# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

MAY 15, 2003

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TM GRAIN TRANSPORT COST INDICATORS	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	Gulf	PNW
Indicator Value* for 05/15	97	98	68	-	-
Compared to Last Week	•	•	<b></b>	-	-

\*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

**TRB Study Committee on Marine Transportation Meets in Washington, DC.** On May 7-8, the Transportation Research Board's (TRB) Committee for a Study of the Federal Role in the Marine Transportation System (MTS) met at the National Academies Keck Center in Washington, DC. The intent of the study is to develop an analytical framework that Federal agencies can use to identify capital and operating needs and coordinate Federal investments and spending on the MTS. The meeting focused on a "working" report outline, including staff and consultant contributions. Discussions included an overview of Federal agency roles in the MTS, the differences in operating transshipment and terminal ports, the role of the United States in international markets, and the effects of the deterioration of U.S. locks and dams on U.S. competitiveness.

There were also panel discussions on container and bulk shipping, which stressed the importance of container trade to the U.S. economy. The roles of various government container security initiatives were discussed, as well as the need to develop intermodal facilities and the importance of the Mississippi River System to U.S. grain exports, about 60 percent of which move through the Mississippi River System. While there was general agreement that the Upper Mississippi River System issues should be resolved, the Inland Waterways Users' Board opposed an increase in users' fees to finance new construction or major repairs. The fee is currently set at 20 cents per gallon of fuel.

According to an industry spokesperson, export elevators and storage facilities are operating at less than full capacity due to a lack of competitiveness of the U.S. agricultural transportation system rather than a lack of supply of agricultural products. In reaction to the suggestion that reservation or scheduling of the locks may be used to solve the congestion or delay problem, the spokesperson mentioned that agricultural shipment is demand and supply sensitive because it is difficult to forecast when shipments will occur.

The Committee reviewed and discussed written and presented material for possible inclusion in a report of the study. The following topics were addressed: Maritime Demand Characteristics and Expectations; Supply of Maritime Infrastructure and Services; Federal Roles and Approaches in Other Modes: Ideas and Opportunities; and Opportunities for Applying Innovative Financing Programs for Maritime Infrastructure and Services.

TRB is a private, nonprofit institution and a unit of the National Research Council. As a principal operating agency of the National Academy of Sciences and the National Academy of Engineering, TRB's mission is to promote innovation and progress in transportation by stimulating and conducting research, facilitating the dissemination of information, and encouraging the implementation of research results. Surajudeen.Olowolayemo@usda.gov

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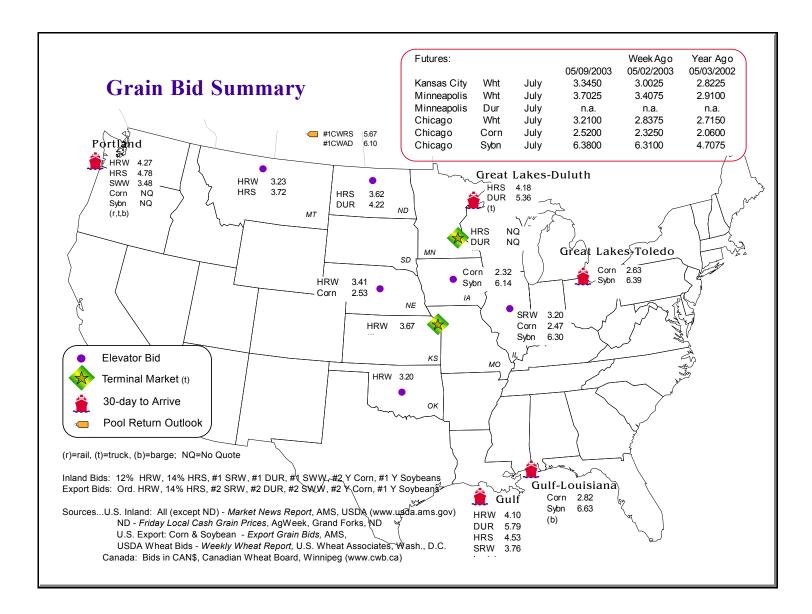
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)					
Commodity	OriginDestination	This week	Last week		
Corn	IL Gulf	-0.35	-0.33		
Corn	NE Gulf	-0.29	-0.28		
Soybean	IA Gulf	-0.49	-0.45		
HRW	KS Gulf	-0.43	-0.60		
HRS	ND Portland	-1.16	-1.22		

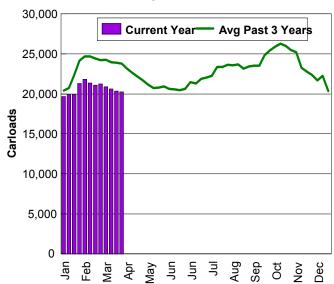
The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.



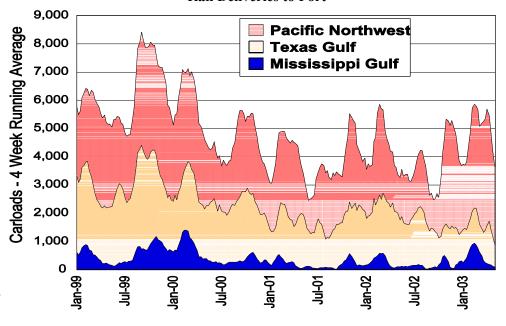
### **RAIL TRANSPORTATION**

Rail Deliverie	s to Port (C	arloads)			
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
04/23/03	24	711	2,574	286	3,595
04/30/03	171	314	2,828	217	3,530
YTD 2003	8,036	19,431	60,618	8,782	96,867
YTD 2002	5,407	35,440	38,038	10,229	89,114
% YTD 2002	149%	55%	159%	86%	109%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806
Source: Transport	ation & Marke	eting/AM	S/USDA; (*)	Incomplete Da	ta

# **Grain Car Loadings for Class I Railroads**



#### **Rail Deliveries to Port**



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

	E	East		West			Canada	
	<b>CSXT</b>	NS	BNSF	KCS	UP	U.S. Total	CN	CP
05/03/03	2,407	3,366	6,524	253	5,651	18,201	3,006	3,773
This Week Last Year	2,967	2,919	5,487	640	6,325	18,338	4,500	3,416
2003 YTD	50,419	58,109	137,267	6,253	115,296	367,344	61,101	62,825
2002 YTD	52,974	57,744	134,877	11,004	121,416	378,015	73,250	66,064
% of Last Year	95%	101%	102%	57%	95%	97%	83%	95%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

U.S. Rail Covered Hopper Cars Online Index\*

April-03 95.0 101.7 94.4 92.6 91.4 94.6

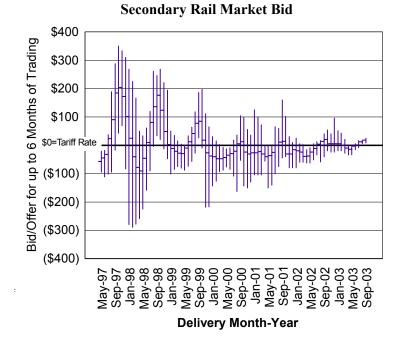
Source: Association of American Railroads; \*Base Year = 2001, Index based on Number of Covered Hopper Cars Online (available for Service).

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Railroad Car 'Auction' Results Average Premium/Discount to Tariff, \$/Car - Last Auction						
Delivery for:	Jun-03	Jul-03	Aug-03			
COT/N. Grain	\$0	\$0	\$0			
COT/S. Grain	no bid	no bid	\$0			
GCAS/Region 1	\$1	no bid	no bid			
GCAS/Region 2	no bid	no bid	no bid			
Source: Transportation & Marketing/AMS/USDA.						

COT=Certificate of	Transportation; (	GCAS=Grain Ca	r Allocation Sy	sten

Secondary Rail Car Market Average Premium/Discount to Tariff, \$/Car - Last Week						
	Delivery Period					
	May-03	Jun-03	Jul-03	Aug-03		
BNSF-GF	\$(6)	\$(12)	\$(6)	\$(1)		
UP-Pool	\$0	\$4	\$6	\$17		



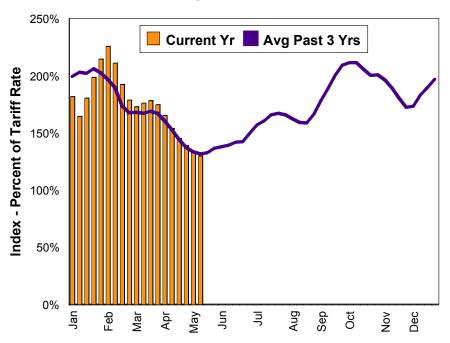
# Tariff Rail Rates for Unit Train Shipments April 2003

Source: www.bnsf.com., approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

Date	Tariff	·	·	·	Rate	Rate Per	Rate/Per
Effective	Item	Commodity	Origin	Destination	Per Car	MT	Bushel*
04/07/03	113710	Wheat	Kansas City, MO	Galveston, TX	\$1,650	\$18.19	\$0.50
04/07/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
04/07/03	46540	Wheat	St. Louis, MO	Houston, TX	\$1,695	\$18.68	\$0.51
04/07/03	113710	Wheat	Kansas City, MO	Laredo, TX	\$2,110	\$23.26	\$0.63
04/07/03	15507	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
04/07/03	31005	Corn	Minneapolis, MN	Portland, OR	\$2,700	\$29.76	\$0.76
04/07/03	1132.002	Corn	Chicago, IL	Baton Rouge, LA	\$1,845	\$20.34	\$0.52
04/07/03	1132.03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$1,970	\$21.72	\$0.55
04/07/03	113210	Corn	Evansville, IN	Raleigh, NC	\$1,816	\$20.02	\$0.51
04/07/03	1132	Corn	Des Moines, IA	Laredo, TX	\$2,525	\$27.83	\$0.71
04/07/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,115	\$34.34	\$0.93
04/07/03	61410	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,073	\$22.85	\$0.62
04/07/03	61110	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,020	\$22.27	\$0.61
04/07/03	1144	Soybeans	Des Moines, IA	Laredo, TX	\$2,817	\$31.05	\$0.85
04/07/03	11441	Soybeans	Evansville, IN	Raleigh, NC	\$1,816	\$20.02	\$0.54

#### **BARGE TRANSPORTATION**

#### Illinois River Barge Rate Index - Rate Quotes



The Illinois River Barge Rate Index averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The Index, along with Rate Quotes and Futures Market bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

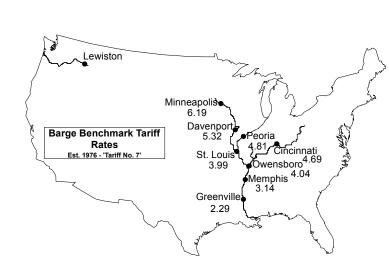
<b>BARGE RATE QUOTES: Southbound Barge Freight</b> Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate						
	5/7/03	4/30/03	June '03	August '03		
Twin Cities	166	166	177	202		
Mid-Mississippi	143	143	151	178		
Illinois River	128	126	138	169		
St. Louis	91	89	104	147		
Lower Ohio	114	115	125	157		
Cairo-Memphis	88	90	102	140		
Source: Transportatio	n & Marketing	/AMS/USDA	Λ			

# BARGE FUTURES MARKET Southbound Barge Freight Nominal/Cash Basis Values

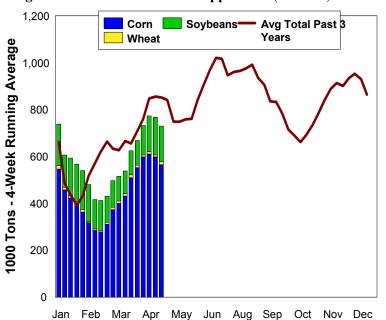
Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

		Contract	Rate		
Week ended	River/Region	Period Period	Futures	Cash	
5/13/03	St. Louis	Jun	n/a	130	
		Aug	n/a	160	
		Oct	n/a	210	
		Nov	n/a	155	
		Dec	n/a	143	
	Illinois River	Jun	n/a	148	
		Aug	n/a	175	
		Oct	n/a	225	
		Nov	n/a	175	
		Dec	n/a	165	

Source: St. Louis Merchants Exchange



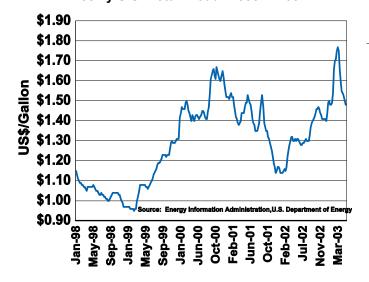
# Barge Movements on the Mississippi River (Lock 27)



	<u>Corn</u>	Wht	<b>Sybn</b>	<u>Total</u>
Mississippi River				
Rock Island, IL (L15)	239	17	42	298
Winfield, MO (L25)	355	39	77	473
Alton, IL (L26)	538	41	93	673
Granite City, IL (L27)	543	36	100	682
Illinois River (L8)	161	2	11	174
Ohio River (L52)	9	0	14	24
Arkansas River (L1)	n/a	n/a	n/a	n/a
2003 YTD	9,003	593	3,579	13,548
2002 YTD	11,463	767	3,827	16,745
% of 2002 YTD	79%	78%	94%	81%
Total 2001	31,878	2,679	10,616	47,091

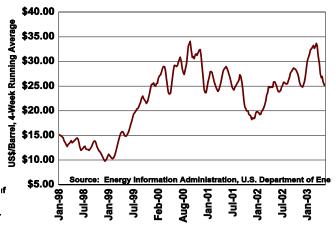
TRUCK TRANSPORTATION

## Weekly U.S. Retail Road Diesel Price



The weekly <b>Diesel Price</b> provides a proxy for trends in U.S
truck rates. Diesel fuel is a significant expense for truck grain
movements, accounting for 37% of the estimated variable cost.
<b>Crude Oil Price</b> is an indicator in future diesel price trends.

# Weekly Brent Crude Price, Friday Close



Crude Oil Prices (05/13/03) US\$ per Barrel	This Week	<u>Last Week</u>	
Light Sweet Crude (NYMEX)	27.79	25.03	<b></b>
Brent Crude	25.48	23.53	<b></b>

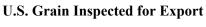
Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Source: www.eia.doe.gov; \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

# GRAIN EXPORTS

U.S. Export Balances (1,000 Metric Tons)									
		Wheat				Corn	Soybean	n Total	
	HRW	SRW	HRS	SW W	DUR	All			
05/01/2003	1,136	362	1,199	510	188	3,393	5,652	2,830	11,875
This Week Year Ago	704	501	476	368	38	2,088	6,405	2,711	11,204
Commulative Exports-C	Crop Year								
02/03 YTD	6,493	2,717	6,016	3,300	694	19,219	26,483	25,282	70,984
01/02 YTD	8,073	5,074	5,130	2,946	1,080	22,303	30,601	24,236	77,140
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185
Source: Foreign Agricult	ural Service	e YTD-Y	ear-to-E	ate (www	w.fas.usda.	.gov)	·	_	·

	Pac	ific Reg	<u>ion</u>	Mis	ssissippi (	<u>Gulf</u>	<u>T</u>	exas Gu	<u>lf</u>	<u>P</u>	ort Region Tota	<u>ıl</u>
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
05/08/03	204	116	58	92	438	173	71	0	0	379	703	71
2003 YTD	3,038	2,068	2,341	1,626	9,399	8,667	1,576	529	50	7,448	19,692	2,154
2002 YTD	3,335	1,853	1,009	2,357	13,539	8,304	2,357	106	240	6,197	24,200	2,703
% of 2002 YTD	91%	112%	232%	69%	69%	104%	67%	498%	21%	120%	81%	80%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906





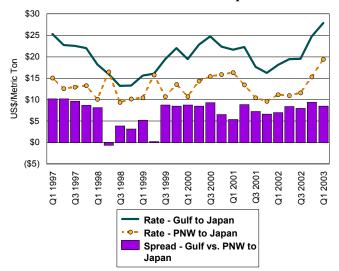
Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary								
04/17/2003 Vancouver	Wheat 11	<u>Durum</u>	Barley 4					
Prince Rupert Prairie Direct	17		1					
Thunder Bay								
St. Lawrence	3,460	1,798	256					
2001/02 YTD	8,878	2,283	711					
2002/03 YTD	3,488	1,798	261					
% of Last Year	255%	127%	272%					
Source: Canadian Gra	ains Commis	sion, Crop Yea	ar 8/1-7/31					

Port Region Ocean Grain Vessels								
		Gulf		Pacific Northwest	Vancouver B.C.			
		Loaded	Due Next	t				
	In Port	7-Days	<u>10-Days</u>	In Port	In Port			
05/01/03	13	30	39	9	8			
05/08/03	15	36	56	6	6			
2002								
Range	(1555)	(3366)	(4482)	(315)	(012)			
2002 Avg	35	51	65	8	5			
Source: Trans	Source: Transportation & Marketing /AMS/ USDA							

### Gulf Port Region Grain Vessel Loading Past 7 Days



#### **Grain Vessel Rates to Japan**



Average Rates & P	ercentage	e Changes	, U.S. Dollars/Metric	Ton	
					%
2003	2002	%	2003	2002	Chang
1 <sup>st</sup> Qtr	1st Qtr	Change	1st Qtr	1st Qtr	e
Gulf to			Pacific NW to		
Japan \$27.91	\$18.25	53%	Japan \$19.43	\$11.31	72%
Mexico -	\$31.49	-			
Venezuela \$15.00	-	-			
N. Europe \$14.50	\$10.67	36%	Argentina/Brazil to	•	
N. Africa -	\$17.58	-	Med. Sea \$25.35	\$17.85	42%-
Med. Sea \$14.50	\$10.97	32%	N. Europe -	\$13.48	-
			Japan -	\$25.59	-

Ocean Freight Rates for Selected Shipments - week ending 5/10/03								
Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)			
U.S. Gulf	Ireland	Grains	May 5/10	25,000	\$26.00			
U.S. Gulf	Angola	Corn	May 15/25	14,550	\$44.15			
PNW	Ethiopia	Wheat	May 15/30	5,440	\$119.63*			
Puerto Rico	Algeria	Wheat	May 12/18	35,400	\$28.75			
U.S. Gulf	Japan	Heavy Grain	May 7/18	54,000	\$34.00			
U.S. Gulf	Djibouti	Wheat	May 25/Jun 5	53,890	\$65.31*			
Norfolk	Latvia	Wheatflour Bggd	Jun 20/30	1,650	\$70.61*			
U.S. Gulf	Angola	Maize Bggd	Jun 7/15	1,500	\$130.00*			

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

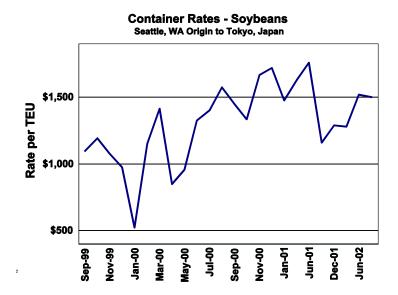
\*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

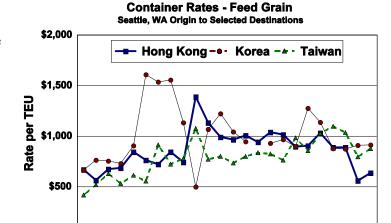
#### **CONTAINER**

\$0

#### **Container Ocean Freight Rates**

Average Rate per TEU, Weighed by Shipping Line Market Share Source: Transportation & Marketing/AMS/USDA, Quarterly Updates





Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.

May-00